UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,752	08/24/2001	Armin Amrhein	A34488 071308.0211	4099

21003 7590 02/11/2005

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
PATEL, RAMESH B	

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/938,752	AMRHEIN ET AL.	
	Examiner	Art Unit	
	Ramesh B. Patel	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/4/02 & 9/9/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 15-28 are presented for examination. Claims 1-14 have been canceled due to the preliminary amendment filed on 11/26/2001.

2. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been received and filed in the application.

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on 3/4/2002 and 9/9/2002 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements being considered by the examiner.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "the program flow" which used in first instance as "the program flow" in line 6 of claim 15. There is insufficient antecedent basis for this limitation in the claim.

Dependent claims, which are not particularly rejected, are rejected based on the rejected base claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoenninger et al. (US Patent 6,260,058).

As to claim 15, Hoenninger teaches the invention including a method of operating a programmed industrial controller equipped with a runtime system for a production machine comprising steps of: checking for occurrence of a desired condition in the operation of the machine is taught as the control program is processed by a microprocessor of a controller under real time conditions (see, abstract, lines 2-4 and figure 1); stopping program flow of the machine operation while checking for the occurrence of said desired condition and waiting for said condition to occur is taught as the control program is divided into tasks assigned a priority and an activation event (see, abstract, lines 4-11 and figures 3-4); increasing the priority of checking for the desired condition relative to the current task priority in the program flow is taught as the processing of task can be interrupted on the basis of a subsequent request for processing a higher priority task is conducted and task can be divided into a number of subtasks to be processed sequentially and within configurable, coherent and non overlapping priority ranges, tasks can interrupt other lower interruption points explicitly inserted by the user (see, abstract, lines 7-16 and figures 3-4 and col. 4, lines 50-54);

and immediately continuing the program flow upon satisfaction of the condition (see, abstract, lines 16-20 and figures 3-3 and col. 3, lines 16-40 and col. 6, lines 50-64).

As to claim 16, Hoenninger teaches the method wherein once the condition has been satisfied, the following program sequence is processed with high priority up to an explicit end of the program sequence (see, abstract and col. 3, lines 16-40).

As to claims 17-18, Hoenninger teaches the method wherein process signals and/or internal signals of the controller and/or variables from user programs are used for the formulation of the conditions and the conditions contain logical and/or arithmetic and/or any desired functional combinational operations (see, abstract and col. 1, lines 11-55).

As to claim 19, Hoenninger teaches the method wherein the user program for the operation of the controller is capable of responding in the manner set forth more than one such condition (see, abstract and figures 1-4 and col. 2, lines 32-58).

As to claims 20-21, Hoenninger teaches the method wherein there are provided for the controller, a plurality of user programs which operate in the manner set forth and the program for operating the controller is available as a customary programming language construct (see, abstract and figures 1-4 and col. 5, lines 21-49).

As to claim 22, Hoenninger teaches an industrial controller for carrying out the method wherein the runtime system of the controller contains a running level model which has a plurality of running levels of different types with different priority, said running levels comprising: a group of levels with synchronously clocked levels, having at least one system level and at least one user level, the levels of this group of levels being capable of being prioritized with respect to one another, a user level for system exceptions, a time controlled user level, an event controlled user level, a sequential user level and a cyclical user level and wherein user levels of the group of levels are able to run synchronously in relation to one of the system levels of the group of levels (see, abstract and figures 1-8 and col. 6, lines 10-49).

As to claim 23, Hoenninger teaches the industrial controller wherein the basic clock of the running level model is derived from any one of an internal timer, an internal clock of a communication medium, an external device or a variable which belongs to the technological process of the machine (see, abstract and col. 6, lines 33-64 and col. 7, line 60 to col. 8, line 20).

As to claim 24, Hoenninger teaches the industrial controller wherein the time controlled user level, the event controlled user level, the sequential running level, the cyclical background level and the user level for system exceptions are optional (see, abstract and figures 1-4 and col. 2, lines 32-67).

As to claim 25, Hoenninger teaches the industrial controller wherein the synchronous levels are clocked in relation to the basic clock with a step-up and/or step-down ration and/or in the ration 1:1 (see, abstract and figures 3-8 and col. 3, line 15 to col. 4, line 13).

As to claim 26, Hoenninger teaches the industrial controller wherein further prioritizing stratifications are provided within the running levels (see, abstract and figures 3-4 and col. 6, lines 33-64).

As to claim 27, Hoenninger teaches the industrial controller wherein user tasks can optionally be run through during system running-up and/or running-down (see, abstract and figures 3-8 and col. 4, lines 6-41).

As to claim 28, Hoenninger teaches the industrial controller wherein user programs which, depending on the type of user level, are programmed in a cycle-oriented or sequential manner can be loaded into the user levels (see, abstract and col. 1, lines 29-55 and col. 6, lines 11-49).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramesh B. Patel
Primary Examiner 2/7/05
Art Unit 2121

rp